August 2004

DATES TO REMEMBER

August 17……..…….…..South Alabama Precision Ag and Field Crops Day
Wiregrass Research and Extension Center, Headland, Al 7:30 AM – 3:40 PM
For more information call 675-6654

August 25...…….……Extension Row Crop Field Day
WFREC-Allentown For more information see flyer

August 26.…..……...…….……..…….2004 Peanut Field Day
NFREC-Marianna For more information call 675-6654

September 29……Core, Ornamental & Turf Review and Test
Milton Extension Office 8:00 AM

IN THIS ISSUE

Extension Row Crop Field Day

West Florida Research & Education Center

Wednesday, August 25, 2004

8:30 am	**Registration**
9:00 am	**Peanut Varieties and Disease Control** *Barry Tillman, Peanut Specialist, University of Florida, NFREC-Marianna* *John Atkins, Santa Rosa County Extension Agent, Livestock/Agriculture*
9:30 am	**Battling the Cotton Hardlock Hex** *Gerald Edmondson, Okaloosa County Extension Director*
10:00 am	**Cotton Varieties and Growth Regulators** *Mike Donahoe, Santa Rosa County Extension Director* *Dru Rush, DPL Agronomist*
10:30 am	**Weed Management/Cotton and Peanuts** *Barry Brecke, Weed Science Specialist, University of Florida, WFREC*
11:00 am	**Are Two Rows Better Than One?** *Daniel Stephenson, Post Doctoral Associate, University of Florida, WFREC*
11:30 am	**Pasture and Fence Row Weed Control** *Jason Ferrell, Weed Science Specialist, University of Florida*
12:00 pm	**Lunch - Provided** Please RSVP by August 23rd to your local County Extension Office for lunch reservations.
1:00 pm	**Does Your Tractor Know Where To Go?** *Paul Robbins, Territory Manager John Deere GPS Farming*
1:30 pm	**Hot Plants For The Cool Season: Alternative Horticultural Crops** *Jamie Gibson, Assistant Professor, University of Florida, WFREC* *Dan Mullins, Santa Rosa County Extension Agent, Horticulture*
2:00 pm	**Forrest Invaders – Have You Seen Them?** *Rick Williams, Associate Professor, University of Florida, WFREC*
2:30 pm	**CEU's & Adjourn**

Sponsored By: Santa Rosa, Okaloosa, Walton, and Escambia County Extension Service; University of Florida West Florida Research & Education Center, University of Florida Extension

Topsin M WSB Receives Crisis Exemption for Florida Cotton

The following is a release for the use of Topsin M to reduce hardlock in cotton. The most current data indicate the number of Topsin M applications is more important than rate (4 sprays better than 3 sprays which was better than 2 sprays).

Release

Today (July 21, 2004) the Florida Department of Agriculture and Consumer Services announced that it has obtained a Crisis Exemption for Topsin M WSB (Thiophanate-methyl – EPA Registration 4581-408 or 73545-16) produced by Cerexagri, Inc. to be used by Florida cotton producers for the suppression of Fusarium hardlock beginning July 21, 2004 and ending August 5, 2004. Before August 5 it is expected the EPA will declare a Section 18, which is now in review**. (*See note below)**

The product (a 70%wettable powder in water soluble bags) can be applied to cotton blooms with up to 4 applications on a 7-14 day schedule at 0.5 to 1 lb/acre for a total not to exceed 4 lbs per acre. The product must be applied at least 40 days before harvest and has a 12 hour restricted entry period.

If using boron, growers should completely dissolve the water soluble bags and Topsin M fungicide in the spray tank before adding boron to the tank. Boron can interfere with the hydration (dissolving) of the water soluble bag film. Good coverage is important as you are trying to protect the blooms. It is recommended that for aerial applications use at least 5 gal of water/acre.

Fusarium hardlock can be a devastating disease of cotton in the hot, humid Florida panhandle, as was experienced during the 2002 growing season. The hardlocked bolls can not be harvested by traditional mechanical cotton pickers. Recent research at the University of Florida's North Florida Research and Education Center in Quincy, FL has shown that protection of the flowers with fungicide can significantly reduce the disease and increase yield. This is the first effective management tool available to growers against hardlock..

Cerexagri, Inc.'s local representative is Larry Worn who can be reached at 229-985-2949 (office) or 484-919-7489 (cell phone).

A copy of the Crisis Declaration (Sec. 18) and a list of distributors for Topsin M WSB fungicide can be obtained by calling Cerexagri's customer service at 1-800-438-6071.

***Note from Bob Moore, Pesticide Registration, Florida Department of Agriculture. August 5, 2004:**

Under EPA (Agency) guidelines, Florida cotton growers may continue to use the specified fungicide beyond the crisis expiration date according to the directions declared in the crisis document. The Agency allows use of this pesticide to continue because our Department has

previously submitted the specific exemption to the Agency. **Cotton growers may continue to use this fungicide until otherwise notified.**

Hopefully, the Agency will notify us soon that the specific exemption has been approved. Until we receive a decision from the Agency on the specific exemption, growers may continue use as described in the crisis declaration even past the crisis expiration date.

Cotton Insects

Fields should be scouted carefully for stink bugs the remainder of the season. Sample bolls approximately the diameter of a quarter for internal damage. Bolls of this size can be easily squashed between your thumb and forefinger. Treatment is recommended if 20 percent internal damage is observed. Internal boll damage is defined as warts or callous growths on the inner surface of the boll wall and /or stained lint. Stink bugs can damage bolls up to 25 days of age. Tarnished plant bugs can only damage bolls up to about 10 days of age. If brown stink bugs are the predominant species present, an organophosphate insecticide such as Bidrin, methyl parathion, or Orthene should be used. Pyrethroids will provide excellent control of southern green stink bugs, but at normal rates will only provide about 50 percent control of brown sting bugs.

We have had high trap counts of both corn earworm (CEW) and tobacco budworm (TBW) moths during the past two weeks. Where TBW has infested non-Bt cotton, pyrethroids have failed to provide consistent control. This is most likely due to pyrethroid resistance. Scouts should observe moths while walking fields to get an idea of which is the predominant species. On non-Bt cotton, non pryrethroid insecticides such as Tracer, Steward, or Denim would be recommended for control of TBW. If CEW is the primary species, a pryrethroid should provide good control. On Bt cotton, TBW will be controlled by the Bt toxin, however supplemental treatment with a pyrethroid for CEW escapes may be needed. To our knowledge, Bt cotton in the county has continued to hold up well to both species.

Scout Peanuts for Foliage Feeders

We are getting reports of various foliage feeding worms in peanuts. One field we checked last Thursday had a high count of small velvetbean caterpillars. The treatment threshold levels are:

Early Season: 3-4/foot of row (before the plants meet in the middle).

Late Season: 5-6/foot of row (after plants have completely covered the middles).

(Refer to Tables 1 and 2 for recommended insecticides.)

Table 1. Suggested insecticides for control of major foliage-feeding caterpillar pests of peanut. Refer to the label for special information and precautions.

Insecticide	Restricted Use	Beet Armyworm	Corn Earworm	Cutworms	Fall Armyworms	Loopers	Rednecked Peanutworm	Velvetbean Caterpillar	REI (Hrs)	Days to Harvest
		--- Amount of Formulation per Acre ---								
Asana XL (*esfenvalerate*)	YES	5.8-9.6 oz[1]	2.9-5.8 oz	5.8-9.6 oz	9.6 oz[1]	--	2.9-5.8 oz	2.9-5.8 oz	12	21
Bacillus thuringiensis	NO	--	--	--	--	See label	--	See label	See label	
Danitol 204 EC *(fenpropathrin)*	YES	--	10.6-16 oz	--	10.6-16 oz	--	--	--	24	14
Karate 2.08 Z *(cyhalothrin)*	YES	1.92 oz[2]	1.28-1.92 oz	0.96-1.6 oz	1.28-1.92 oz[2]	1.92 oz[1]	0.96-1.6 oz	0.96-1.6 oz	24	14
Lannate LV *(methomyl)*	YES	1.25-3 pt	0.75-3 pt	1.8-3 pt	0.75-1.5 pt	1.5-3 pt[2]	--	1.5-3 pt	48	21
Lorsban 15G *(chlorpyrifos)*	NO	--	--	6.8-13.9 lb[3]	--	--	--	--	24	21
Orthene 75S *(acephate)*	NO	--	1-1.33 lb	--	1-1.33 lb	1-1.33 lb	--	1-1.3 lb	24	14
Sevin 4F[4] *(carbaryl)*	NO	--	1-1.5 qt	2 qt	1-1.5 qt	--	1 qt	1 qt	12	14
Tracer (spinosad)	NO	2-3 oz	1.5-3 oz	--	2-3 oz	--	1.5-3 oz	1.5-3 oz	4	3

[1]Suppression only.
[2]For small larvae.
[3]Apply at plant in 6-12 inch band over the row for preventative treatment; late preventative treatment may be applied at early flowering to pegging in 6-8 inch band over the row. Do not apply more than 13.3 lbs. formulation/acre/application or 26.6 lbs. per season. Refer to the label for ounces/1000 ft of row based on row spacing and band-width.
[4]Application to wet foliage during periods of high humidity may cause injury to tender foliage.
[5]Adults only.
[6]Maximum of 1 application/year. At temperatures greater than 90^{o}F with high humidity, some leaf phytotoxicity may occur.
[7]May also be used as a dry powder "planter box" treatment at a rate of 4 oz/100 lb of seed. See label directions for mixing procedure to insure adequate seed coverage.

Table 2. Suggested insecticides for miscellaneous foliage pests of peanut. Refer to the label for special information and precautions. (Footnotes may be found at the end of Table 1.)

Insecticide	Restricted Use	Grasshoppers	Thrips	Potato Leafhopper	Three-cornered Alfalfa Hopper	Twospotted Spider Mite	Whiteflies	Whitefringed Beetle	REI	Days to Harvest
		---Amount of Formulation per Acre---							(Hrs)	
Asana XL (*esfenvalerate*)	YES	5.8-9.6 oz	--	2.9-5.8 oz	--	--	--	--	12	21
Comite II 6.5EC (*propargite*)[6]	YES	--	--	--	--	2.25 pt	--	--	7 days	14
Danitol 2.4 EC *(fenpropathrin)*	YES	--	--	6-10.67 oz	--	10.67-16 oz	10.67-16 oz	--	24	14
Di-Syston 15G *(disulfoton)*	YES	--	6.7 lb	6.7 lb	6.7 lb	--	--	--	48	
Karate 2.08 Z *(cyhalothrin)*	YES	1.28-1.92 oz	1.28-1.92 oz	0.96-1.6 oz	1.28-1.92 oz	1.92 oz[1]	--	0.96-1.6 oz[5]	24	14
Lannate LV *(methomyl)*	YES	--	1.5-3 pt	1.75-3 pt	1.5-3 pt	--	--	--	48	21
Nemacur 15G *(fenamiphos)*	NO	--	10-17 lb	--	--	--	--	--	24	21
Orthene 75S *(acephate)*	NO	0.33-0.67 lb	0.5-1 lb[7]	1-1.33 lb	0.5-1 lb	--	11 oz	--	24	14
Sevin 4F *(carbaryl)*[4]	NO	--	1qt	1 qt	1 qt	--	--	2 qt[5]	12	14
Temik 15G *(aldicarb)*	YES	--	7-14 lb	--	7-14 lb	--	--	--	48	90
Thimet 20G *(phorate)*[1]	YES	--	5 lb	5 lb	5 lb	--	--	--	48	90

Tank-Mix Publication Available

In response to the numerous questions about potential tank-mixes of herbicides, fungicides, and insecticides, a regional publication entitled "Tank Mixing Chemicals Applied to Peanut Crops: Are the Chemicals Compatible?" has been recently developed. This joint publication includes updated tank-mix information from several land-grant institutions including UGA, North Carolina State University, Texas A&M University, and the University of Florida. The following is one of seven tables which are included in the publication. The entire publication can obtained from your Santa Rosa County Extension or downloaded from the following web address: www.peanut.ncsu.edu/ag653.pdf

Compatibility of postemergence herbicides with fungicides applied to peanut*

	Weed species	Fungicides that DID reduce weed control	Fungicides that DID NOT reduce weed control
Arrow with crop oil concentrate	Broadleaf signalgrass	Bravo Weather Stik, Headline	Folicur
	Large crabgrass	Bravo Weather Stik, Headline	Folicur
	Texas panicum	Bravo Weather Stik	Folicur, Headline
Basagran with			
nonionic surfactant	Yellow nutsedge	Bravo Weather Stik plus Tilt, Kocide, ManKocide, Tilt plus Montero	Abound, Folicur, Dithane F-45, Omega 500, Tilt, Tilt plus Stratego
(80/20 blend)			
Blazer with nonionic surfactant (80/20 blend)	Smooth pigweed	Folicur, Kocide, Tenn-Cop 5E	Abound, Bravo Ultrex, Bravo Weather Stik, Bravo Weather Stik plus Tilt, ManKocide, Omega 500, Tilt
Butyrac 200 without adjuvant**	Entireleaf morningglory		Abound, Bravo Weather Stik, Endura, Headline, Omega 500, Stratego
	Sicklepod	Abound, Bravo Ultrex, Folicur, Kocide, ManKocide	Bravo Weather Stik, Echo, Headline, Rovral
	Smooth pigweed	Abound, Bravo Ultrex, Bravo Weather Stik, Folicur, Kocide, ManKocide, Omega 500, Rovral, Tenn-Cop 5E, Tilt/Bravo	Echo, Rovral
	Tall morningglory		Abound, Bravo Weather Stik, Folicur, Headline
Cadre with nonionic surfactant (80/20 blend)	Texas panicum	Folicur	Abound, Bravo Weather Stik, Headline, Moncut, Tilt/Bravo
	Sicklepod		Abound, Bravo Weather Stik, Folicur, Headline, Moncut, Tilt/Bravo
	Yellow nutsedge		Abound, Artisan, Bravo Weather Stik, Folicur, Headline, Moncut, Tilt/Bravo, Stratego
Poast with crop oil concentrate	Broadleaf signalgrass		Abound, Bravo Weather Stik, Folicur, Headline
	Large crabgrass	Abound, Bravo Weather Stik, Folicur, Headline	Endura, Omega 500, Stratego
	Texas panicum		Abound, Bravo Weather Stik, Folicur, Headline
Pursuit with nonionic surfactant (80/20 blend)	Smooth pigweed	Kocide, ManKocide, Omega 500, Tenn-Cop 5E	Abound, Bravo Ultrex, Bravo Weather Stik, Bravo Weather Stik plus Tilt, Dithane F-45, Folicur, Tilt, Tilt plus Montero, Tilt plus Stratego
Select with crop oil concentrate	Broadleaf signalgrass		Bravo Ultrex, Bravo Weather Stik, Bravo Weather Stik plus Tilt, Folicur, Omega 500, Tilt
	Goosegrass	Bravo Weather Stik, Bravo Ultrex, Bravo Weather Stik plus Tilt	Folicur, Omega 500, Tilt
	Large crabgrass	Abound, Endura, Bravo Weather Stik, Folicur, Headline, Kocide, ManKocide, Rovral, Tenn-Cop 5E, Tilt plus Montero	Omega 500, Stratego
	Texas panicum	Abound, Bravo Weather Stik, Bravo Ultrex, Bravo Weather Stik plus Tilt, Echo, Kocide, ManKocide, Rovral, Tilt plus Montero	Dithane F-45, Folicur, Omega 500, Tilt plus Stratego

Source: NC State University, AGW 653, June 04

Monitor Crop Maturity Closely

We are now in the home stretch for the 2004 peanut crop. Peanuts planted on May1will be just over 90 days old at the first of August. A hull-scrape maturity profile should be taken when fields are approximately 110 days old to get a gauge on if the field is maturing at the expected rate. Therefore, fields planted around May 1st should have an initial maturity sample taken around August 20th.

There were a few fields that were planted between April 15th and May 1st. The April 15th planted peanuts were 108 days old as of August 1st. Those fields need to be checked as soon as possible. Temperatures have been normal to slightly above normal, therefore, the maturation process should be processing at an expected pace.

Heavy pest pressure, especially diseases and insects, as well as drought stress can interfere with the maturity process. After the initial maturity evaluation, fields should be checked in another two weeks to determine if the maturity process is proceeding normally. Do not make a final maturity determination more than two weeks out. A lot of things can happen in the final two weeks that may alter the maturity process.

The peanut pod-blasting machine is, again, available at the West Florida REC in Allentown. Harvest time is a busy time, to avoid long delays at the Research Center call a day in advance. Samples will be accepted from 7:00am to 3:00pm.

To make an appointment call Greg at 336-7956 or LINK Radio #: 27621*4. Greg must be available to operate the machine.

WHEN TO SAMPLE: Each field should be sampled at approximately 115-125 days after planting (110-120 days for Virginia Type). If needed, sample a second time before the predicted digging date to determine if maturity is proceeding normally.

HOW TO SAMPLE: Collect a sample by selecting at least 5 spots in the field. Avoid skips, wet spots, etc. Dig up 3 adjacent plants in each spot. Carefully separate the center plant and remove from it all pods match-head size and larger and place in a plastic bag. Collect at least 180, but not more than 220 pods. In fields larger than 50 acres, it is best to collect more than one sample. Different varieties and planting dates a week or more apart in the same field should be sampled separately.

Label each sample bag, seal it and take to the Research Center. Be sure not to let the sample get too hot or dry out.

It only takes a couple to minutes to process a sample. Once the sample is processed the technician can show you how to place the peanuts on a color profile board and determine the optimum maturity date for the field. He will be available to show you how to profile your samples but will not do them all for you. Everyone who uses the machine and profile board at the Research Center will be expected to clean up their own mess.

The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product names and does not signify that they are approved to the exclusion of others.

Sincerely,

Mike Donahoe
County Director
Santa Rosa County

John D. Atkins
Extension Agent
Santa Rosa County